## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-25. (Cancelled)

26. (Currently Amended) A method of forming an electromechanical device comprising the steps of:

fabricating a first beam and an integrated circuit monolithically on a semiconductor substrate using standard semiconductor process flows;

patterning above the first beam a sacrificial material;

fabricating a second beam by performing the steps of:

depositing a first conductive material on the sacrificial material by means of sputtering or evaporation;

patterning a sacrificial mold for a second conductive layer;

electrodepositing a thick second conductive layer over the mold;

removing the sacrificial mold and an excess amount of the first conductive layer underneath the mold;

depositing and patterning a mechanical support layer on top of the device;

patterning and etching the semiconductor substrate from a backside of the substrate; and

releasing the first beam so as to be movable by removing the sacrificial material on top of the first beam to form an air cavity above the first beam, the ~~moveable~~ first beam being attached to the substrate at one or more points..

27. (Original) The method of forming a device as recited in claim 26, wherein the step of depositing the second conductive layer is followed by a step of polishing the conductive layer.

28. (Original) The method of forming a device as recited in claim 26, wherein the steps of depositing the first and second conductive layers are each repeated after a dielectric layer is deposited and patterned over each of the first and second conductive layers.

29. (Original) The method of forming a device as recited in claim 27, wherein the dielectric is a mechanical support layer.

30. (Previously Presented) The method of forming a device as recited in claim 26, wherein the substrate is selected from the group of semiconductor materials consisting of Si, SiGe and GaAs.

31. (Previously Presented) The method of forming a device as recited in claim 28, wherein the mechanical support layer is selected from the group consisting of a screen-printed polyimide, a photoimageable polymer, and a dry-etchable polymer.

32. (Original) The method of forming a device as recited in claim 26 further comprising the step of forming a polysilicon heater in the movable beam for heating and thereby actuating the moveable beam.

33. (Currently Amended) The method of forming a device as recited in claim 26, wherein the first beam is fabricated from a plurality of conductive layers selected from the group comprising polysilicon, aluminum and copper, and from a plurality of dielectric layers selected from the group consisting of doped silicon dioxide, undoped silicon dioxide, a form of silicon nitride, and a low-k dielectric.

34. (Previously Presented) The method of forming a device as recited in claim 32, wherein the low-k dielectric is selected from the group consisting of SiLK, Black Diamond, Nanoglass E, and Zirkon LK.

35. (Previously Presented) The method of forming a device as recited in claim 26, wherein the second beam is fabricated from a plurality of conductive layers selected from

the group consisting of gold, copper, silver, platinum, titanium, tungsten, aluminum, nickel, and alloys thereof.

36. (Original) The method of forming a device as recited in claim 26 wherein, the step of fabricating the first beam includes locating a conductive film at a contact area of the first beam, thereby allowing metal-to-metal contact between the first beam and the second beam.

37. (Original) The method of forming a device as recited in claim 26 wherein, the step of fabricating the first beam includes locating a dielectric film at a contact area of the first beam, thereby allowing metal-to-dielectric contact between the first beam and the second beam.

38. (Previously Presented) A method of forming an electromechanical device comprising the steps of:

fabricating a moveable beam and an integrated circuit on a semiconductor substrate using standard semiconductor process flows;

patterning above the movable beam a sacrificial material;

fabricating a fixed beam by:

depositing a thick conductive film on the sacrificial material by means of sputtering or evaporation;

patterning the conductive film via standard photolithography; and

etching the conductive film;

depositing and patterning a mechanical support layer on top of an area covered by the device;

patterning and etching the semiconductor substrate from a backside of the substrate; and

releasing the moveable beam by removing the sacrificial layer placed on top of the moveable beam to form an air cavity above the first beam, the moveable beam being attached to the substrate at one or more points.

39. (Original) The method of forming a device as recited in claim 38 further comprising the step of forming a polysilicon heater in the movable beam for heating and thereby actuating the moveable beam.

40. (Original) The method of forming a device as recited in claim 38wherein, the step of fabricating the movable beam includes locating a conductive film at a contact area of the moveable beam, thereby allowing metal-to-metal contact between the movable beam and the fixed beam.

41. (Original) The method of forming a device as recited in claim 38 wherein, the step of fabricating the movable beam includes locating a dielectric film at a contact area of the moveable beam, thereby allowing metal-to-dielectric contact between the movable beam and the fixed beam.

42. (Previously Presented) The method of forming a device as recited in claim 38, wherein the mechanical support layer is selected from the group consisting of a screen-printed polyimide, a photoimageable polymer, and a dry-etchable polymers.